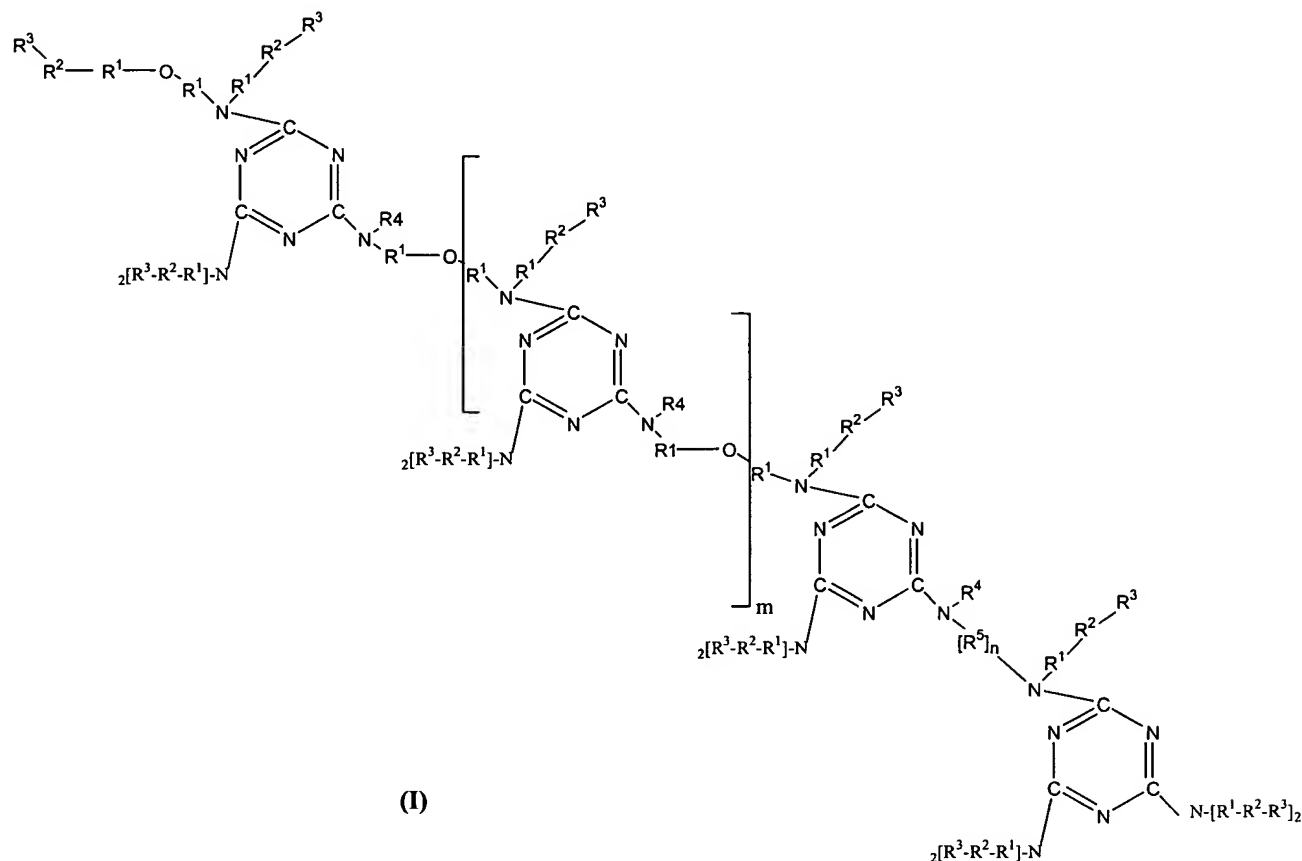


Amendments to and Listing of the Claims:

Kindly amend the claims as follows:

1. (currently amended) A melamine ring-containing co-polymer of formula (I)



wherein m is an integer of 1 to 100;

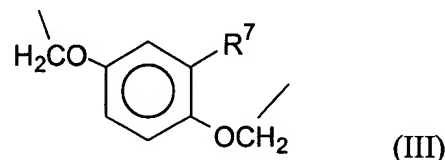
R¹ is independently selected from an alkyl group having one to twenty carbon atoms;

R² is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R³ is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

R⁴ is independently selected from -C_pH_{2p}OH; -C_pH_{2p-1}OH; -C_pH_{2p-2}OH, wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R⁵ is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):



and; n is an integer of one to thirty;

wherein the melamine ring-containing co-polymer that is the reaction product of a at least one melamine base resin and a at least one reactant compound, wherein the at least one reactant compound comprises a cashew nut shell liquid and has at least one functional group selected from a carboxyl group, a hydroxyl group, and a thiol group and combinations thereof.

2. (currently amended) The co-polymer of claim 1, wherein the cashew nut shell liquid comprises reactant compound is cardanol and cardol.

3. (currently amended) The co-polymer of claim 1, wherein the at least one reactant compound is further comprises a fatty acid.

4. (currently amended) The co-polymer of claim 1, wherein the at least one reactant compound further comprises at least one compound is selected from the group consisting of lauric acid, myristic acid, palmitic acid, stearic acid, arachidic acid, palmitoleic acid, oleic acid, ricinoleic acid, linoleic acid, and arachidonic acid and combinations thereof.

5. (currently amended) The co-polymer of claim 1, wherein the at least one reactant compound further comprises at least one compound which is selected from the group consisting of dodecyl mercaptan, phenyl mercaptan, lauryl thioglycolate, octyl thioglycolate, and mixtures thereof.

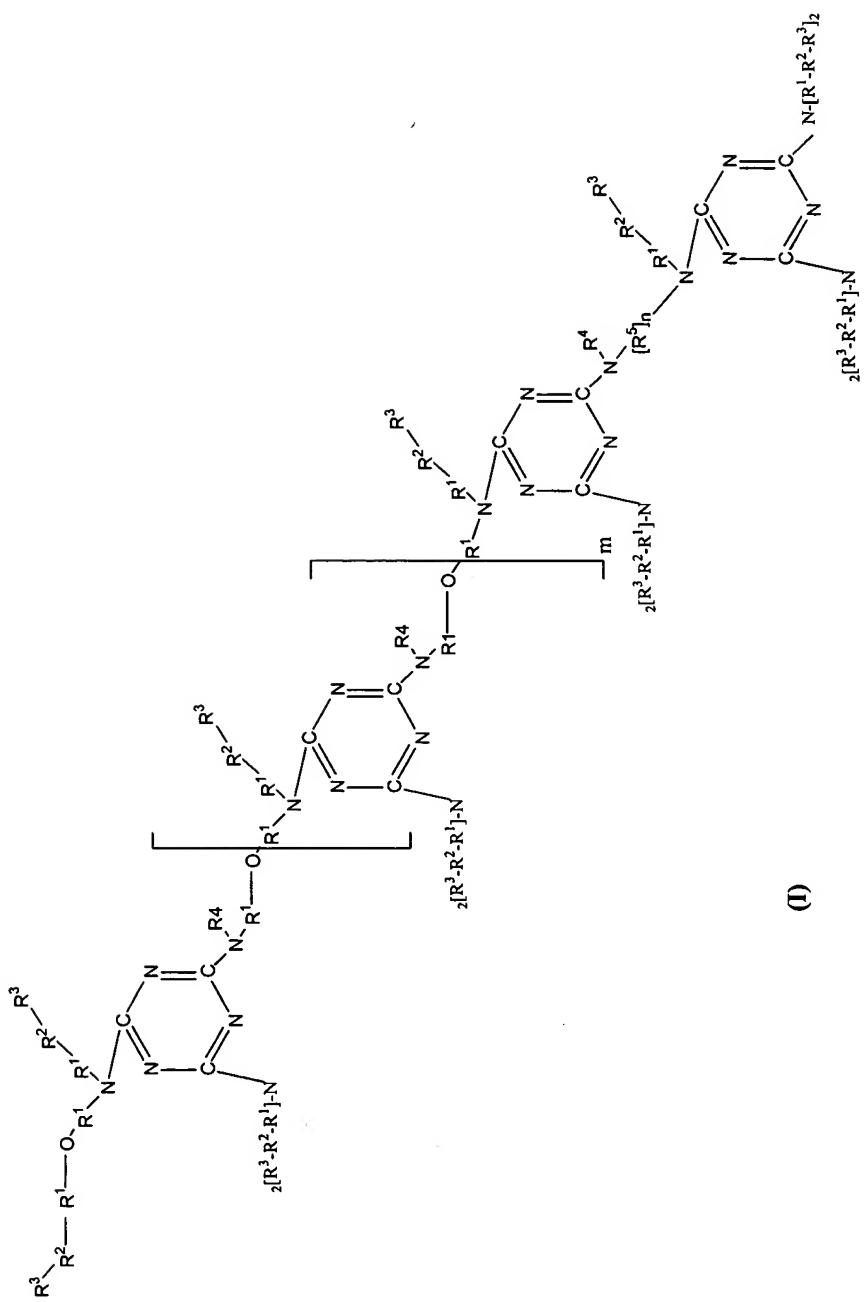
6. (currently amended) The co-polymer of claim 1, wherein the at least one base melamine resin is modified or unmodified and is selected from the group consisting of a

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melamine resin, a melamine-formaldehyde resin, a melamine-urea-formaldehyde resin, ~~and~~ a urea-formaldehyde resin and combinations thereof.

7. (original) A melamine ring-containing co-polymer of formula (I):



(I)

wherein m is an integer of 1 to 100;

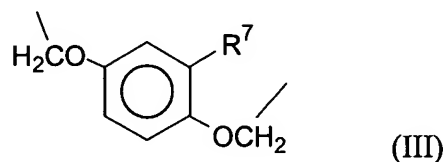
R^1 is independently selected from an alkyl group having one to twenty carbon atoms;

R^2 is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R^3 is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

R^4 is independently selected from $-C_pH_{2p}OH$; $-C_pH_{2p-1}OH$; $-C_pH_{2p-2}OH$, wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R^5 is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III) :



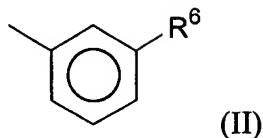
and; n is an integer of one to thirty.

8. (original) The co-polymer of claim 7, wherein R^1 is independently selected from a group having two to seven carbon atoms.

9. (original) The co-polymer of claim 7, wherein at least one of R^3 is independently selected from a group having thirty to sixty carbon atoms.

10. (original) The co-polymer of claim 7, wherein at least one of R^3 is independently selected from a group having six to twelve carbon atoms.

11. (original) The co-polymer of claim 7, wherein at least one R^3 is a structure represented by the formula (II):



wherein R^6 is independently selected from an alkyl group, an allyl group, and an alkynyl group having ten to forty carbon atoms.

12. (original) The polymer of claim 11, wherein R^6 is a group having fifteen to thirty carbon atoms.

13. (original) The co-polymer of claim 11, wherein R^6 is a group selected from $-(CH_2)_7CH=CH-(CH_2)_5CH_3$; $-(CH_2)_7CH=CHCH_2CH=CH(CH_2)_2CH_3$; $-(CH_2)_7CH=CHCH_2CH=CHCH_2CH=CH_2$; and $-(CH_2)_{14}CH_3$.

14. (currently amended) A method of preparing a melamine ring-containing co-polymer comprising reacting ~~a~~ at least one melamine base resin with ~~a~~ at least one reactant compound wherein the reactant compound comprises cashew nut shell liquid and has at least one ~~a~~ functional group selected from a carboxyl group, a hydroxyl group, ~~and~~ a thiol group and combinations thereof, wherein the copolymer has formula (I):



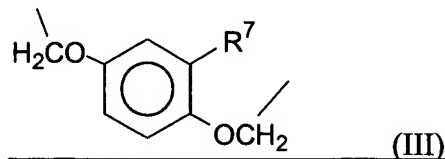
R¹ is independently selected from an alkyl group having one to twenty atoms;

R² is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R³ is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

R⁴ is independently selected from -C_pH_{2p}OH; -C_pH_{2p-1}OH; -C_pH_{2p-2}OH, wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

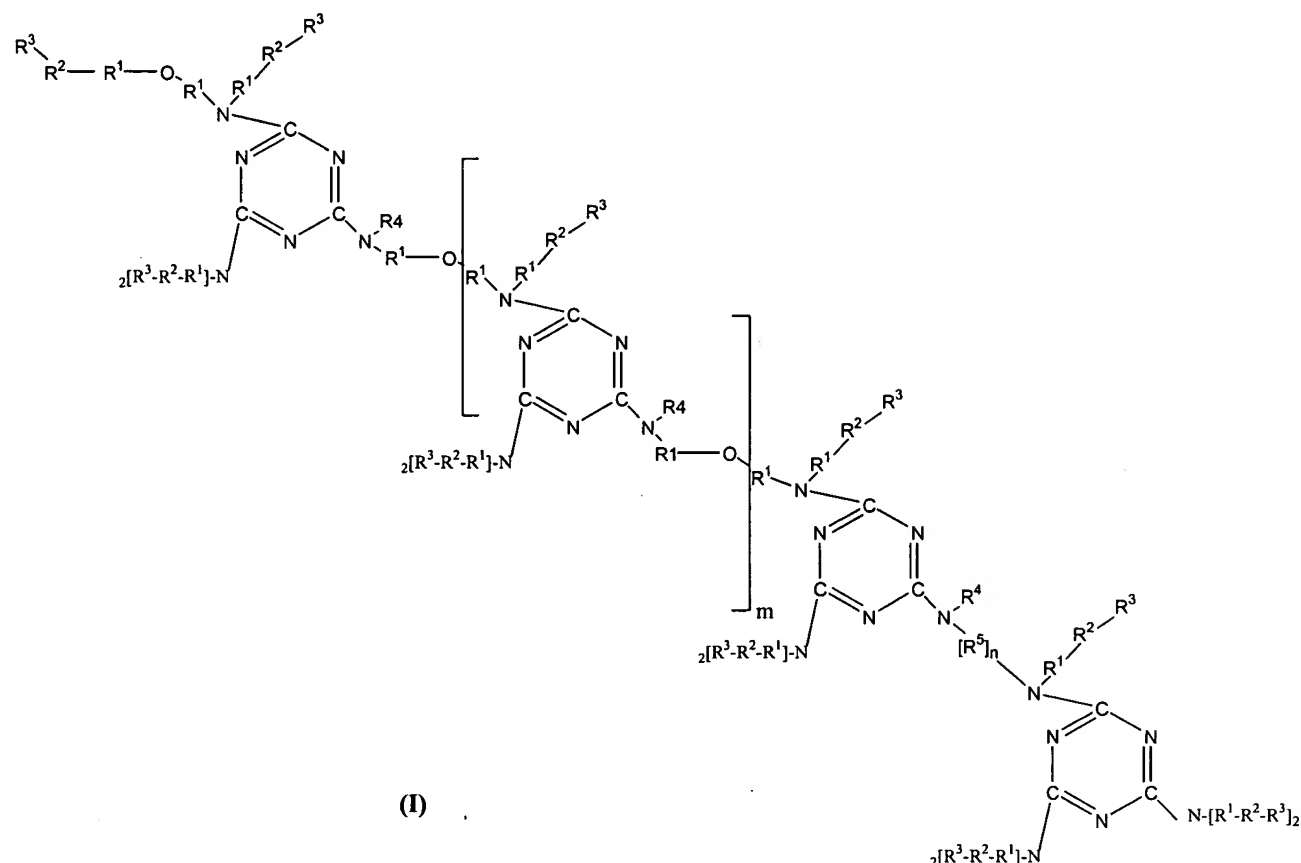
R⁵ is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III) :



and; n is an integer of one to thirty.

15. (original) The method of claim 14, wherein the reaction is carried out in the presence of a proton-donating catalyst.
16. (original) The method of claim 15, wherein the catalyst is a sulfo radical containing catalyst.
17. (currently amended) The method of claim 15, wherein the catalyst is selected from the group consisting of methanesulfonic acid, phosphoric acid, nitric acid, oxalic acid, maleic acid, hexamic acid, phthalic acid, acrylic acid, para-toluene sulfonic acid, dinonyl naphthalene sulfonic acid, magnesium bromide, zinc nitrate, aluminum nitrate, ~~and~~ magnesium nitrate and combinations thereof.
18. (currently amended) The method of claim 14, wherein the at least one reactant compound is comprises cardol and cardanol.
19. (currently amended) The method of claim 14, wherein the at least one reactant compound is comprises a fatty acid.
20. (currently amended) The method of claim 14, wherein the at least one reactant compound comprises a compound which is selected from the group consisting of lauric acid, myristic acid, palmitic acid, stearic acid, arachidic acid, palmitoleic acid, oleic acid, ricinoleic acid, linoleic acid, ~~and~~ arachidonic acid and combinations thereof.
21. (currently amended) The method of claim 14, wherein the at least one base melamine resin is modified or unmodified and is selected from the group consisting of a melamine resin, a melamine-formaldehyde resin, a melamine-urea-formaldehyde resin, ~~and~~ a urea-formaldehyde resin and combinations thereof.

22. (original) A surface having a coating, wherein the coating comprises a melamine ring-containing co-polymer having the structure of formula (I):



wherein m is an integer of 1 to 100;

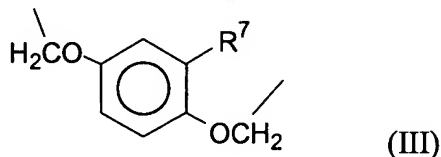
R^1 is independently selected from an alkyl group having one to twenty carbon atoms;

R^2 is independently selected from the group consisting of an oxygen atom and a sulfur atom;

R^3 is independently selected from an alkyl group, an allyl group, an alkynyl group, an aryl group, and a phenyl group, having one to seventy carbon atoms;

R^4 is independently selected from $-C_pH_{2p}OH$; $-C_pH_{2p-1}OH$; $-C_pH_{2p-2}OH$, wherein p is an integer of one to seven; a hydrogen atom; a carboxyl group, an alkyl group; an allyl group; and an alkynyl group;

R^5 is independently selected from the group consisting of an alkyl group, an alkyl group containing at least one ether linkage, and the group represented by the formula (III):



and; n is an integer of one to thirty.

23. (new) A melamine ring containing co-polymer that is a reaction product of a cashew nut shell liquid and at least one melamine-formaldehyde resin wherein the cashew nutshell liquid comprises cardanol and cardol; wherein the cardanol is present in an amount ranging from about 80% to about 100% by weight of the cashew nut shell liquid and the cardol is present in an amount ranging from about 1% to about 20% by weight of the cashew nut shell liquid.

24. (new) The melamine ring containing co-polymer of claim 23, wherein the reaction is carried out in the presence of a proton-donating catalyst.

25. (new) The melamine ring containing co-polymer of claim 23, wherein the at least one melamine resin comprises a methylated melamine formaldehyde resin.

26. (new) The method of claim 23, wherein the cashew nutshell liquid is in the form of a cashew nut shell liquid distillate.

27. (new) The copolymer of claim 1, wherein the at least one base melamine resin is a methylated-formaldehyde resin.